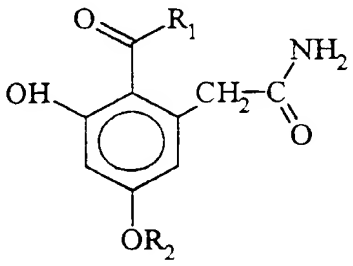
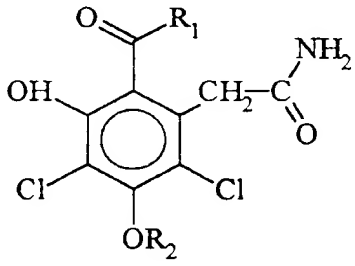
Figure 1

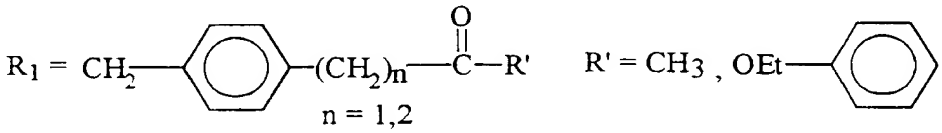
	p10	p9	p8	p7	p6	p5	p4	p3	p2	**p1**	**p1'**	p2'	p3'	p4'	p5'	p6'	p7'	p8'	p9'	p10'
POL1M	i	g	n	c	m	e	a	l	F	**Q**	**G**	p	l	q	y	k	d	l	k	i
POL1S	i	g	n	c	m	e	a	l	F	**Q**	**G**	p	l	q	y	k	d	l	k	i
POL32	i	g	n	c	m	e	a	l	F	**Q**	**G**	p	l	q	y	k	d	l	k	i
POL3L	i	g	n	c	m	e	a	l	F	**Q**	**G**	p	l	q	y	k	d	l	k	i
COXA2	i	g	n	c	m	e	a	l	F	**Q**	**G**	p	l	r	y	k	d	l	k	i
COXA4	i	g	n	c	m	e	a	l	F	**Q**	**G**	p	i	q	y	r	d	v	m	i
BOVEV	i	g	n	v	l	e	a	l	F	**Q**	**G**	p	v	c	y	k	p	l	r	i
COXA9	v	g	a	t	l	e	a	l	F	**Q**	**G**	p	p	i	y	r	e	i	k	i
COXB1	v	g	a	t	l	e	a	l	F	**Q**	**G**	p	p	i	y	r	e	i	k	i
COXB5	v	g	a	t	l	e	a	l	F	**Q**	**G**	p	p	i	y	r	e	i	k	i
EC11G	v	g	a	t	l	e	a	l	F	**Q**	**G**	p	p	i	y	r	e	i	k	i
COXB4	v	g	a	t	l	e	a	l	F	**Q**	**G**	p	p	v	y	r	e	i	k	i
SVDVH	v	g	a	t	l	e	a	l	F	**Q**	**G**	p	p	v	y	r	e	i	k	i
SVDVU	v	g	a	t	l	e	a	l	F	**Q**	**G**	p	p	v	y	r	e	i	k	i
COXB3	v	g	t	t	l	e	a	l	F	**Q**	**G**	p	p	v	y	r	e	i	k	i
HUEV7	t	q	d	k	l	e	a	l	F	**Q**	**G**	p	p	t	f	k	e	i	k	i
HRV1B	v	v	d	v	m	s	a	i	F	**Q**	**G**	p	i	s	l	d	a	p	p	p
HRV2	v	v	d	v	m	t	a	i	F	**Q**	**G**	p	i	d	m	k	n	p	p	p
HRV89	a	a	q	a	m	e	a	i	F	**Q**	**G**	i	d	l	q	s	p	p	p	p
HRV14	i	t	d	s	l	e	t	l	F	**Q**	**G**	p	v	y	k	d	l	e	i	d

Figure 2A



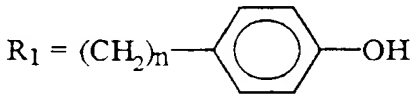


1.

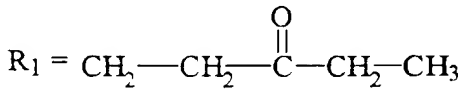


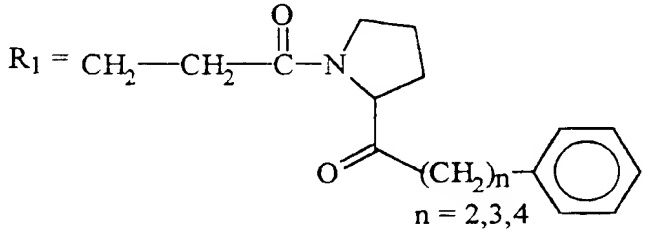
n = 1,2

*

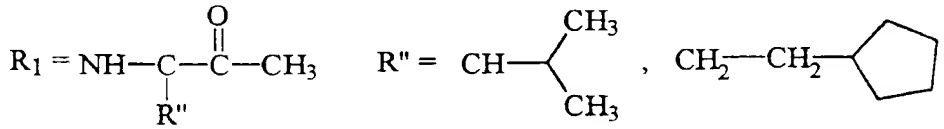


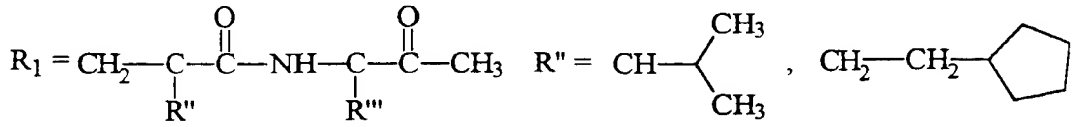
2.





n = 2,3,4

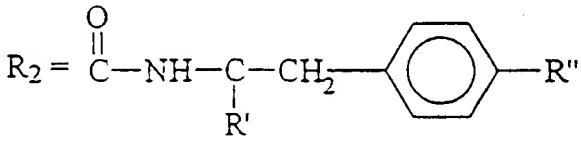


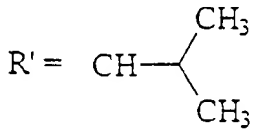


R''' = aromatic ring

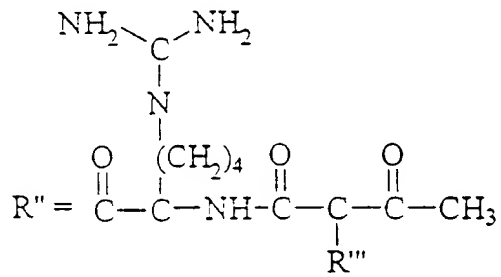
Figure 2A (con't)

3.





, $CH_2—CH_3$, CH_3 , Or any branched alyphatic chain.

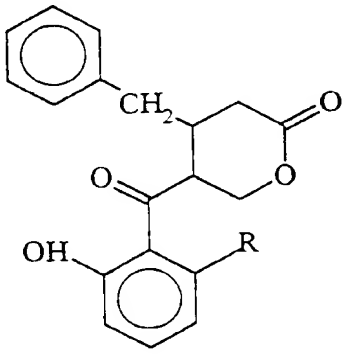


R''' = Small or branches aliphatic like side chain of Leu, Val, Ile o

Figure 2A (con't)

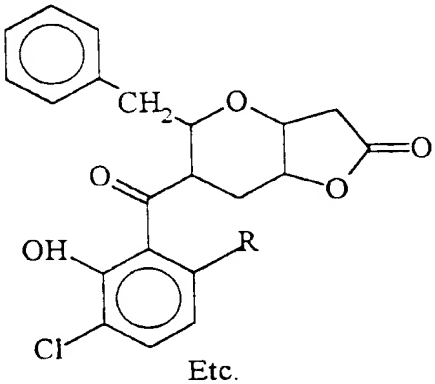
4.

R_1 =



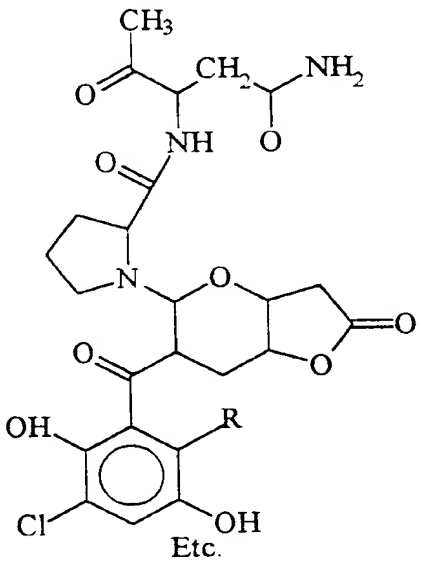
Etc.

R_1 =



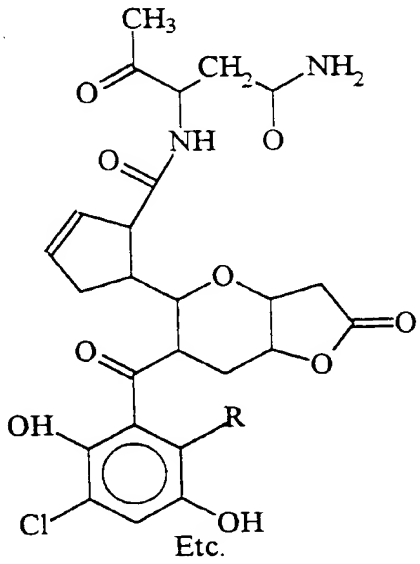
Etc.

R_1 =



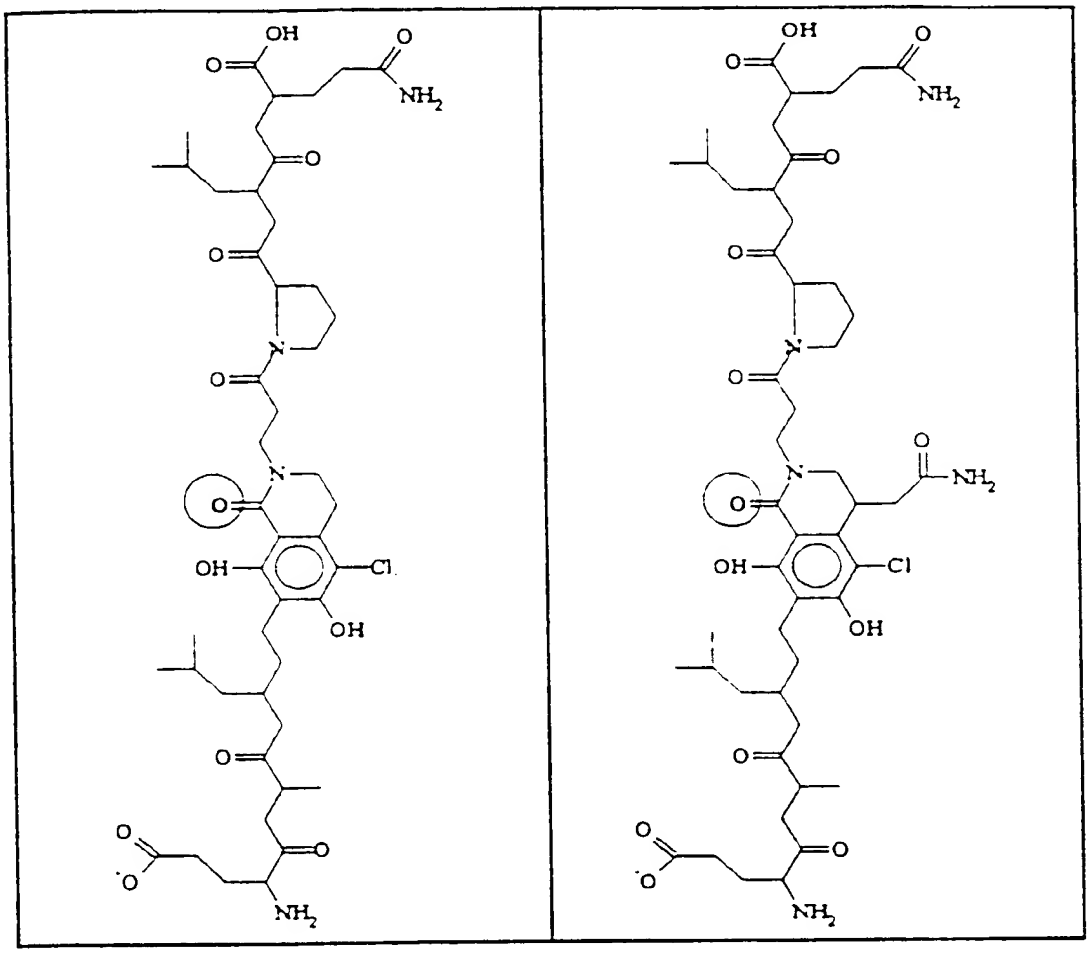
Etc.

Or



Etc.

Figure 2B


OH
O
NH2
O
O
O
N
O
N
O
OH
Cl
OH
O
O
O
NH2
OH
O
NH2
O
O
O
N
O
N
O
OH
Cl
OH
O
O
O
NH2